REMARKS

This is a full and timely response to the Office Action of March 31, 2008. By the present Amendment, claims 1, 10, 27 and 28 have been amended to more particularly and distinctly point out the novelty and non-obviousness of the present invention. It is requested that claims 21-26 be cancelled without prejudice. Reconsideration and allowance of the application and all presently pending claims are respectfully requested.

Response to 35 USC 103 rejections

In the final Office Action dated March 31, 2008, the Examiner has cited a new prior art reference (U.S. Patent No. 6,876,963 to Miyahira et al. (hereafter "Miyahira")) and combined them in some way with one of the previously cited Sadhwani, Chong or Wood references in rejecting all pending claims under 35 USC 103(a). The rejection of claims outstanding is as follows:

Claims 1, 5, 8-12, 15-18, 24 and 27: Sadhwani in view of Miyahira

Claims 2-4, 6-7, 13-14, 21-23 and 25-26: Sadhwani and Miyahira in view of Wood

Claims 28-30: Chong in view of Miyahira

Based on the above amendments and the present remarks, Applicant submits that these rejections have been traversed and that the present claims are allowable over all prior art of record, considered singly or in combination.

By the present Amendment, Applicant has amended independent claims 1, 10, 27 and 28 to recite the aspect of the present invention pertaining to the use of nodes in an ontological database, specifically wherein the nodes *are not topic dictionaries* and wherein each word of the matched words is associated with a set of hypernyms and holonyms. Support for these amendments can be found, for example, in paragraphs 0056-0061 of the present application publication no. 2004/0102201. As noted therein, the present invention can employ ontologies for topic detection in real-time speech and text translation. Topic-detection has not previously been though of as a natural candidate for knowledge-based approaches. Ontologies are lexical hierarchies organized according to a specific set of principles. These principles include classifying words according to sub-classes and super-classes, *not topics*. Because superclasses do not stand in a topic-subtopic relationship to their subclasses, ontological classes are not considered good topic indicators. *The present invention does not use ontological categories directly as topic indicators.* Rather, each content word in the input sequence is associated with a set of both hypernyms (the superclass of the word's class) and holonyms (the whole of which the word represents a part). The resulting set will be used to match a set of possible topics.

By contrast, the newly cited Miyahira reference classifies words and determines topics based on key word hits (see col. 7, line 46- column 8, line 67 cited in the Office Action). Indeed, the Examiner's cites Miyahira as a system that "detects the topic of the input text based on keywords within the text and matches them with nodes (topic dictionaries within the database) to select the dictionary." (see Office Action page 4, lines 5-10). Thus, in Miyahira, dictionary

selection is based on key word text matches with topic dictionaries. Miyahira does not teach the use of ontologies or ontological databases as claimed in the present invention. As disclosed in columns 4-7 of Miyahira, different dictionaries are shuffled and prioritized based on key word matches. To the extent there are "nodes" in Miyahira, they are topic dictionaries used as topic indicators (see col. 5, lines 25-45, showing dictionaries for the Internet, Arts, Sports, Business, etc.). Indeed, the Examiner has equated topic dictionaries in Miyahira with "nodes in an ontological database". Accordingly, Miyahira teaches away from the present invention as claimed.

The Sadhwani and Chong references have been distinguished in prior responses and clearly lack in teaching context or topic recognition. To the extent Miyahira discloses any type of context or topic recognition and dictionary selection, it does so by matching keywords with topic specific dictionaries. As noted above, this clearly teaches away from the knowledge-based approach of the present invention, wherein the nodes in the ontological database are not topic dictionaries and wherein each word of the matched words is associated with a set of hypernyms and holonyms.

For the above reasons, Applicant submits that none of the Sadhwani, Chong or Miyahira references, either singly or in combination, discloses, teaches or suggests the invention as presently claimed by this Amendment. The prior art must teach or suggest *all* claim elements in order to find anticipation or obviousness, and *all* words in a claim must be considered in judging the patentability of that claim against the prior art (see MPEP §§ 706.02(j) and 2143.03). Claims 10,

27 and 28 have been amended similarly to claim 1, and it is Applicant's position that these claims are similarly not anticipated or obviated by any of the references of record. Applicant thus submits that all of these claims are allowable, and that the remaining dependent claims are also allowable based upon being dependent from an allowable independent claim.

CONCLUSION

Based on the foregoing, Applicant submits that the present application is in position for prompt adjudication and allowance. Applicant believes that all of the claims currently pending in the present application are now in condition for allowance, and an early notice to that effect is earnestly solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the present application, the Examiner is invited to contact Applicant's undersigned representative at the address and phone number provided below. A three-month extension of time request is being filed simultaneously with this Amendment, along with a Request for Continued Examination.

The Commissioner is hereby authorized to charge Deposit Account No. 50-0766 in payment of the required fees.

Respectfully submitted,
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Attached: Petition for 3-month extension of time
Request for Continued Examination

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